

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> :

H01L 21/768, 21/48 // 51/00

A2

(11) International Publication Number:

WO 99/10929

(43) International Publication Date:

4 March 1999 (04.03.99)

(21) International Application Number: PCT/IB98/01145

(22) International Filing Date: 27 July 1998 (27.07.98)

(30) Priority Data:

97202589.4

22 August 1997 (22.08.97)

EP

(71) Applicant: KONINKLIJKE PHILIPS ELECTRONICS N.V.  
[NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven  
(NL).

(71) Applicant (for SE only): PHILIPS AB [SE/SE]; Kottbygatan 7,  
Kista, S-164 85 Stockholm (SE).

(72) Inventors: DRURY, Christopher, John; Prof. Holstlaan 6,  
NL-5656 AA Eindhoven (NL). MUTSAERS, Cornelis,  
Marcus, Johannes; Prof. Holstlaan 6, NL-5656 AA  
Eindhoven (NL). HART, Cornelis, Maria; Prof. Holstlaan  
6, NL-5656 AA Eindhoven (NL). DE LEEUW, Dagobert,  
Michel; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(74) Agent: KOPPEN, Jan; Internationaal Octrooibureau B.V., P.O.  
Box 220, NL-5600 AE Eindhoven (NL).

(81) Designated States: JP, European patent (AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

**Published**

*Without international search report and to be republished  
upon receipt of that report.*

(54) Title: A METHOD OF PROVIDING A VERTICAL INTERCONNECT BETWEEN THIN FILM MICROELECTRONIC DEVICES

(57) Abstract

A simple and reliable method of providing a vertical interconnect between thin-film microelectronic devices is provided. In said method, a tool tip (20) is used to make a notch (104) in a vertical interconnect area (100) of two organic electrically conducting areas (3, 6) separated from each other by an organic electrically insulating area (5). The method is used in the manufacture of integrated circuits consisting substantially of organic materials.

